

EXECUTIVE ORDER
NO. 91-3
WATER CONSERVATION FOR STATE FACILITIES

Announcing the development and implementation of a program to decrease water use at State owned and leased facilities. (Facilities are defined as buildings; complexes; recreational, maintenance, storage, and convenience areas; and highway rights-of-way.)

WHEREAS, Arizona is aware of the need to reduce water use within Active Management Areas (AMAs) and throughout the State; and

WHEREAS, Arizona has established mandatory conservation requirements for all water users within AMAs through the adoption of legislatively mandated management plans; and

WHEREAS, a number of Arizona communities outside AMAs have passed ordinances requiring water conservation measures; and

WHEREAS, Arizona desires to lead this water use reduction effort through example as well as through its regulatory authority;

NOW, THEREFORE, I, Rose Mofford, Governor of the State of Arizona, do hereby designate the Arizona Department of Administration, in consultation with the Arizona Department of Water Resources, to execute the following:

I. With regard to all State facilities constructed after January 1, 1991, or for which construction contracts have been awarded after January 1, 1991:

A. Install Ultra-Low Flow Plumbing Fixtures

1. All lavatory faucets shall be equipped with either spring loaded faucets that close when not in use or with metering valves that close automatically after delivering twenty-five hundredths of a gallon, except for required handicapped facilities that may be equipped with faucets designed for the disabled.
2. All kitchen faucets and replacement aerators shall be designed to deliver no more than two and one-half gallons per minute or shall be equipped with flow control devices that deliver not more than two and one-half gallons per minute.
3. All shower heads shall be designed to deliver no more than two and one-half gallons per minute.
4. All water closets shall be designed to use no more than one and six-tenths gallons per flush.
5. All urinals shall be designed to use no more than one gallon per flush. No urinals may be installed that use a timing device to flush periodically irrespective of demand.
6. Evaporative cooling systems shall be equipped with water recycling or reuse systems.
7. All hot water systems that deliver or recirculate not domestic or potable water, except for fixtures or devices intended for space heating, shall have the delivery or circulating portion of the system, including the main supply and return pipes, insulated with materials that comply with section 201 of the Uniform Plumbing Code, as amended, and Sections 17 through 20, Chapters 18, 19, and 20 and Tables 17A, 5C, and 5D of the Uniform Building Code, as amended.

B. Install the most water efficient appliances and processes commercially available at a reasonable price, considering the long-term water and energy savings that will accrue as a result of their use.

C. Install cooling towers, evaporative cooling systems, and air conditioning units that are the most water efficient facilities commercially available.

- D. Design all landscaping to incorporate the xeriscape concept and, within this water efficient design, limit the water-intensive landscaped area to no more than 10 percent of the total landscaped area. Within Active Management Areas, water-intensive landscaping is defined as any plants not listed on low water use plant lists that are contained in each AMA management plan. Outside of AMAs, water-intensive landscaping is defined as turf grass.

This provision is waived in the following circumstances:

- o for arboretums used for research/educational purposes;
 - o for public parks, recreational and civic facilities where water-intensive landscaping is appropriate for athletic, recreational or ceremonial purposes;
 - o for institutional facilities where water-intensive landscaping is appropriate for athletic or recreational purposes.
- E. Design all permanent irrigation systems (if applicable) to incorporate the latest commercially available water conservation technology to include drip irrigation, computerized controllers, climatic sensors and automatic shut-off valves, etc.
- F. Establish and maintain seasonally adjusted irrigation schedules and other conservation oriented practices.
- G. Cause all effluent or other wastewater generated by the facility, to the extent that it is economically and technically feasible, to be reused or recharged to an underground aquifer.
- H. Cause all landscaping to be irrigated with effluent or other wastewater from the facility or available to the facility, whenever economically and technically feasible.
- I. Sections A through H may be waived for any facilities that have completed the facility design stage prior to January 1, 1991, if the Director of Water Resources determines that it would be economically unreasonable to revise such design.

II. With regard to all State buildings constructed prior to January 1, 1991, or for which construction contracts have been awarded prior to January 1, 1991:

- A. Retrofit all standard plumbing fixtures that exceed the specifications listed in Section I.A. Retrofitting is required only if the fixtures are scheduled to be replaced or repaired in accordance with regularly scheduled maintenance activities or renovation activities identified and funded during the course of a fiscal year.

The following fixtures are covered by this provision:

1. All lavatory faucets and replacement aerators shall be retrofitted to deliver no more than two gallons per minute or shall be equipped with flow control devices that deliver no more than two gallons per minute.
2. All kitchen faucets and replacement aerators shall be retrofitted to deliver no more than two and one-half gallons per minute or shall be equipped with flow control devices that deliver no more than two and one-half gallons per minute.
3. All shower heads shall be retrofitted to deliver no more than two and one-half gallons per minute.
4. All water closets shall be retrofitted to use no more than one and six-tenths gallons per flush.

- B. Evaluate all cooling facilities to ensure maximum recycling of blowdown water with a goal of exceeding 2,000 ppm Total Dissolved Solids prior to blowdown and/or reuse of blowdown or wastewater. This evaluation is required when the cooling facility is scheduled to be replaced, repaired, or subject to regularly scheduled maintenance checks, whichever occurs first.
- C. Conduct a landscape audit on State facilities. Landscape audits are required if a facility has one or more acres of landscaped area, whose percentage of water-intensive landscaped area exceeds 20%, if it uses a permanent irrigation system, and whose facilities maintenance programs/budgets identify significant redesign and/or renovation. Redesign facility landscapes to limit water-intensive landscaped area to 20% or less, unless the area is used as an arboretum for research/educational purposes, a public park, recreational area, or civic/ceremonial area. Within Active Management Areas, water-intensive landscaping is defined as any plants not listed on low water use plant lists that are contained in each AMA management plan. Outside of AMAs, water-intensive landscaping is defined as turf grass. Existing inefficient irrigation systems are to be replaced with higher efficiency systems, including computerized controllers, climatic sensors, etc.
- D. Redesign all existing rights-of-way adjacent to State facilities and State highways that are maintained by the State if they are planted primarily with water-intensive landscaping. Within Active Management Areas (AMA), water-intensive landscaping is defined as any plants not listed on low water use plant lists that are contained in each AMA management plan. Outside of AMAs, water-intensive landscaping is defined as turf grass. The new landscape design shall be consistent with the individual user right-of-way provisions of the applicable Second Management Plans adopted by the Department of Water Resources. Existing irrigation systems that supply water to these areas shall also be renovated so that only enough water will be supplied, through a drip irrigation system, to support the low water use vegetation required under the right-of-way provisions of the Second Management Plan. Redesign is required only if redesign, renovation, or reconstruction activities are contained within budgeted maintenance or construction programs. Whenever possible, effluent shall be used as a source of water.



IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Arizona.

A handwritten signature in cursive script, reading "Rose Mofford".

G O V E R N O R

DONE at the Capitol in Phoenix this fourth day of February in the year of Our Lord One Thousand Nine-Hundred and Ninety-One and of the Independence of the United States the Two Hundred and Fifteenth.

ATTEST:

A handwritten signature in cursive script, reading "Richard Hahoney".

Secretary of State